

REMARKS

In view of the following remarks, Applicant respectfully requests reconsideration and allowance of the subject application. No claims are cancelled. No claims are amended. New claim 17 is added. Claims 1-17
5 are pending. This amendment is believed to be fully responsive to all issues raised in the Final Office Action mailed August 30, 2004.

Claim Rejections

Rejections Under 35 U.S.C. §103

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Claims 1-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,260,945 to Rodeheffer (hereinafter, "the '945 patent") in view of U.S. Patent Application Publication No. 2002/0034178 to Schmidt, et al. (hereinafter "the '178 patent"). Applicant
15 respectfully traverses these rejections.

Independent **claim 1** explicitly recites the limitation of *preferentially routing exchanges over a port of the at least one port having a status value selected from the group of active and normal when a port having such status exists and a target node of the exchange is reachable over that port.*

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The Action asserts that the '945 patent discloses this limitation and cites to Col 3 lines 65-67 – Col 4 lines 1-8. (The Office does not provide the citation in its Rejections on pages 3-4 of the Action, but does provide the citation in the Response to Arguments section, page 7 last paragraph). Applicant respectfully disagrees with the Office's characterization of the '945
25 patent.

In an attempt to further prosecution Applicant provides below text from the '945 patent beginning with the paragraph directly preceding the text cited by the Office. The '945 patent describes:

5 [A] mesh connected network 100. The network 100 is a set of host computers 120 and switches 124-130 that are interconnected by links, which are bi-directional data channels. In the preferred embodiment, each host 120 in the network has a network controller 132 which couples the host 120 to two distinct switches (e.g., switches 124 and 126 in the case of
10 host 120-1). The two links 134 and 136 which couple the host 120 to switches 124 and 126 are identical, except that only one of the two links is active at any one time. (emphasis added) For this reason link 136 is shown as a dashed line to indicate that it is inactive. Col. 3 lines 53-65.

15 Whenever the active link 134 between a host computer and a switch fails, the host's network controller 132 automatically activates the other link 136, thereby reconnecting the host to the network. It is strongly preferred that the two links 134 and 136 for each host be coupled to two different
20 switches so that if an entire switch fails all the hosts coupled to that switch will have alternate paths to the network. Generally, the provision of two alternate paths or channels from each host to the network provides sufficient redundancy that no single hardware failure can isolate a host from the network. Col 3
25 lines 65-67 – Col 4 lines 1-8

Assuming arguendo that the “links” of the ‘945 patent are equivalent to the “ports” of claim 1, the ‘945 patent fails to disclose “preferentially routing exchanges over a port of the at least one port having a status value selected from the group of active and normal when a port having such status exists and a target node of the exchange is reachable over that port” as recited in claim 1. The ‘945 patent describes “two links 134 which... are identical except that only one of the two links is active at any one time”. “Whenever the active link 134 between a host computer and a switch fails, the host's network controller 132 automatically activates the other link.” As such the ‘945 patent does not disclose, teach or suggest assessing the two links. The two links “are identical except that only one of the two links is active at any one time” and the host's network controller 132 automatically activates the other link in the case of failure of the first link. The ‘945 patent does not disclose or even contemplate “preferentially routing exchanges over a port of the at least one port having a status value selected from the group of active and normal when a port having such status exists and a target node of the exchange is reachable over that port.” In contrast the ‘945 patent “automatically” switches from one “identical” link to the other. The ‘945 patent automatically switches regardless of the condition of the “other link”. The ‘945 patent does not disclose or suggest utilizing the condition of the “other link” in its methodology. The controller simply activates the other link whenever a failure of the active link occurs. Due to intervening events the “other link” may in fact be unavailable when the controller switches to it. As such, the ‘945 patent teaches directly away from the limitation of claim 1

which requires “preferentially routing exchanges over a port of the...having a status value selected from the group of active and normal”.

The ‘134 patent is equally silent as to this limitation of claim 1 and as such the ‘945 and ‘134 patents fail to teach or describe the elements of claim

- 5 1. Accordingly, Applicants request the rejection of claim 1 under 35 U.S.C. §103(a) be withdrawn.

Dependent **claims 2-8** depend from independent claim 1 and are allowable by virtue of this dependency. In addition, claims 2-8 recite
10 limitations neither disclosed nor suggested by the ‘945 patent, alone or together with the ‘178 application.

Independent **claim 9** recites limitations similar to those described above in relation to claim 1 and is allowable for at least the reasons
15 described above in relation to claim 1.

Dependent **claims 10-16** depend from independent claim 9 and are allowable by virtue of this dependency. In addition, claims 10-16 recite limitations neither disclosed nor suggested by the ‘945 patent, alone
20 together with the ‘178 application.

New **claim 17** is added. Claim 17 does not contain new matter, and is fully supported in the specification as originally filed. Claim 17 recites limitations which are not taught or suggested by the art of record. Claim 17
25 recites:

- monitoring to determine a status of individual ports of a node of a storage area network; the status comprising one of: active, normal, probationary, or failed;
- 5 • in an event of an individual port having a failed status, detecting a repair of the individual port, and upon detecting the repair, advancing the status of the individual port to one of: active or probationary;
- 10 • detecting when an individual port having a probationary status operates without error for a predetermined period and thereupon advancing the individual port from the probationary status to a status comprising: active or normal; and
- 15 • preferentially assigning exchanges to individual ports having a status of active or normal when at least one port having such status exists and a target node of the exchange is reachable over that port.

CONCLUSION

Claims 1-17 are believed to be in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of the present application. Should any issue remain that prevents immediate allowance of the application, the Examiner is encouraged to contact the undersigned attorney to discuss the unresolved issue.

Respectfully Submitted,
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